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SAN CLEMENTE ISLAND AND ITS BIRDS.

BY GEORGE F. BRENINGER.

SAN CLEMENTE ISLAND lies fifty miles to the south from San Pedro, California, well out on the broad bosom of the Pacific. Midway is Catalina Island, that noted summer resort; and to the west, seventy-five miles from San Pedro, is San Nicholas. These islands, though distant by at least one hundred miles from Santa Cruz, Santa Rosa, and San Miguel Islands, are known collectively as the Santa Barbara group. It is but reasonable that they bear considerable affinity one with another in their flora and fauna, and while this is true in a way, there are instances quite to the contrary.

Geologically speaking these islands are the exposed tops of mountains, a sunken chain that ran parallel with the Coast Range. San Clemente Island, of which this paper treats, has an altitude of nearly 3000 feet, and a length of twenty-three miles by five miles wide. Frost is unknown, and in consequence vegetation grows rank most of the year.

Early in February of the present year (1903) I was instructed by the curator of the ornithological department of the Field Columbian Museum to make a collection of the birds on San Clemente and visit the other islands if possible. In accordance therewith I secured passage on a 33-foot gasoline schooner that made periodical trips to the island in quest of fish.

The length of my stay was gauged accordingly. On the island accommodations were secured with the man in charge of the San Clemente Wool Company's sheep. This man and his wife are the only inhabitants of the island, apart from a Chinese camp whose occupants remain on the island only during certain periods of fishing. The island is one of great interest alike to the ornithologist, botanist, and student of pre-historic man.

I found the rocky, surf-beaten shore tenanted by thousands of Black-bellied Plovers (*Squatarola squatarola*) in winter dress, and Black Turnstones (*Arenaria melanocephala*). A number of each were taken but proved so excessively fat that it was thought best to use the limited time on better material. The gulls found about

the island were the Western Gull (*Larus occidentalis*), Heermann's Gull (*Larus heermanni*), California Gull (*Larus californicus*), and the Glaucous-winged Gull (*Larus glaucescens*). The few individuals seen of *Larus glaucescens* were immature birds. Those seen of *Larus californicus* were migrating northward in small bunches. I had hoped to learn something of the nesting of *Larus heermanni* on the island, but in this I was disappointed. My host, who had spent most of fifteen years on the island, often found pleasure, from his solitary occupation, in noting the time different birds laid eggs. *L. heermanni* has never been known to nest on the island. *L. occidentalis* is the only one that brings forth its young there.

Out in the channel several lone individuals of the Black-vented Shearwater (*Puffinus gavia*) were seen skimming the swells. None were seen near land. A few California Pelicans (*Pelecanus californicus*) were seen among a number of Cormorants (*Phalacrocorax penicillatus* and *P. pelagicus resplendens*). Both of the cormorants nested on the island, but the pelicans are said to nest on some of the other islands. While rowing around the north end of the island my host pointed out to me nests of Fish Hawks (*Pandion haliaëtus carolinensis*), Bald Eagles (*Haliaeetus leucocephalus*), and Ravens (*Corvus corax sinuatus*), built on some projecting ledge or hole in the seawall. Our objective point, that morning, was a large rock, a mile distant from the end of the island, where my host said there was an eagle's nest, and at that date there should be eggs. As we neared the rock the huge nest, with a white head protruding, was outlined against the sky. Great seas broke about this time-worn mass of granite. A landing can be made only in calm weather. After the force of three or four swells had been broken, the boat was run up to the rock, and I jumped ashore and hastened upward while my man pulled the boat away to save it from being broken. The nest held two eggs, which were taken, but the one parent shot at was lost, falling in the surf or on the end of the island. Rough seas prevented a landing being made.

Up on a hillside, among green grass, my host pointed out another eagle's nest. The accumulation of years' repairing of the old nest had given it such height that a man standing by its side

could not see into the cavity. There were no indications of the occupancy of this nest. Very old birds prove vicious antagonists. A pair of eagles had used two nests alternately, one on each side of a deep gorge. As they have used one or the other during the past fifteen years they were known to be old birds, with a bad record. One season, at sheep-shearing time, one of the employees of the Wool Company, fresh from a land where there were no eagles, essayed to ride to the edge of the barranca and have a look at the young eagles. From above the old eagle swooped with unerring aim, and it was fortunate the grasp was not deeper, as with angry screams she flew away with his hat, dropping it into the sea. It was with this same eagle I was dealing. My man had gone down after the eggs, and while I was giving some minor directions, in an unguarded moment, a little dog that had followed from the house ran with a pitiful whine under my legs and curled up there in mortal terror. I had sat down on the ground, perhaps on account of proximity to the edge of the abyss and at the same time to have 'full swing' at rapid shooting. A moment after the dog had taken refuge an eagle came within a foot of striking me in the face with its wing. My gun came to my shoulder instantly. Bang! and a fine white-headed bird lay dying at the bottom of the barranca. The female, too, was secured.

Ravens (*Corvus corax sinuatus*) were numerous about the island; thirty-eight were seen circling over a small interior valley at one time. It was yet too early for eggs, though nests of previous years were seen along the seawall and in the side of the barrancas. At one place seven nests were seen in a space of less than one hundred yards. Even in this unfrequented spot the raven maintains his time-honored trait of the preservation of its kind by placing its nest in inaccessible places. Although shy birds at all times, curiosity gets the best of them now and then, and for this reason I brought away two fine skins.

One Western Red-tailed Hawk (*Buteo borealis calurus*) and a pair of Duck Hawks (*Falco peregrinus anatum*) were seen, and a male of the Duck Hawk was secured. White-throated Swifts (*Aëronautes melanoleucus*) were seen darting up and down some of the deep cañons. Hummingbirds were also detected, but the species could not be determined while in flight.

Particular interest attaches itself to many of the land birds. Centuries of isolation has developed habits and features quite different from the same species or closely related forms of the mainland. From association with most of the geographical races of *Melospiza* I have learned to frame Song Sparrows in the same scene with rippling brooks, moist meadows, and tule-bordered lagoons. Over the whole length and breadth of San Clemente Island there is no fresh water, except what may gather after a rainfall in the rock basins at the bottoms of the washes. There is absolutely no swamp ground, yet Song Sparrows are there in thousands, from the shores to the highest point of the island, feeding and nesting among the bushes of the hillsides, along with Bell's Sparrow (*Amphispiza belli*). On the mainland Bell's Sparrow marks the other extreme, making its home on the dry sage-covered mesas. Another departure is that of the San Clemente Wren (*Thryomanes leucophrys*), a numerous bird on the island, where it nests in the holes and crevices of the rocks. I am inclined to believe it also places its nest amid the protective arms of the prickly pear. *T. bewickii spilurus* and *T. b. leucogaster*, two closely allied forms of the mainland, both nest in holes in trees. The change is probably due to the conditions, for on most of the island there are no trees.

The same is true of *Carpodacus*, the form inhabiting the island being known as *Carpodacus frontalis clementæ*. The sheep-sheds at the ranch were lined with nests of this bird, old and new, and at that early date I took several sets of four and five eggs. There were some nests built among the spiny leaves of the prickly pear, but by far the greater number were built in holes in the rocky wall of the sea. A pair built their nest in the interstices between the sticks of an eagle's nest. There were at the time of my visit no eggs in the finch's nest, though the eagle's nest was tenanted. The question naturally arises, does this species pass back and forth from the mainland to the island?

To a bird having the power of flight, as in *Carpodacus*, this is not at all impossible. On clear days Catalina Island is clearly visible from the mainland, only twenty-five miles away, while the channel between Catalina and San Clemente is but twenty-two miles wide. The House Finch nest built in an eagle's nest, of

which mention was made, was on a rock a mile from the island. These birds when disturbed flew without hesitation direct to the island. At Monterey, Cal., I have seen Robins (*Merula migratoria propinqua*), and Rufous Hummingbirds, in their northward movement leave the land at Point Pinos, flying directly out to sea, crossing the bay. Later while out three miles from shore, I saw Hummingbirds pass at the rate of one every five minutes. The distance from Point Pinos on the south to Point Santa Cruz, the north side of the bay, is thirty miles. While the migration of *Carpodacus* from the mainland to the nearer islands is possible, I think it very improbable. Migration is prompted largely by meteorological changes and food supply. On San Clemente Island food is abundant and the weather conditions are much the same the year round and whatever migratory instinct the House Finches ever possessed has been lost.

The Horned Lark, set apart as *Otocoris alpestris insularis*, a common bird on the island, is the most intensely colored variety of this species I have ever taken. The same is true of the Burrowing Owl (*Speotyto cunicularia hypogæa*) found on the island. Specimens compared with some from San Pedro, shows the island bird to be much darker.

One solitary Mountain Plover (*Podasocys montana*) was seen and taken. My host told me they wintered on the island in incredible numbers. Flocks of Sanderling (*Calidris arenaria*), and a few Hudsonian Curlew (*Numenius hudsonicus*) were seen on the beaches. Black Oyster-catchers (*Hæmatopus bachmani*) were said to inhabit the island, but I was not favored with a glimpse of these "birds with redlegs," as they are known to the fishermen.

I am at a loss to account for the mortality among the Auklets (*Ptychoramphus aleuticus*) frequenting the water about the island. Along the shores and on the water dead Auklets were seen everywhere. Eagles and Duck Hawks fed on those that were not yet dead, while ravens and gulls fed by day on the dead that were thrown up among the rocks, and the foxes foraged over the same ground at night.

A flock of Meadowlarks (*Sturnella magna neglecta*) was encountered well up toward the top of the island. These were resident and bred on the island. Contrary to the habits of most birds that

are never molested by man, it was absolutely impossible to approach these birds except by stealth. I met the birds each morning, and as many times tried to secure a specimen; one hundred to two hundred yards was the nearest approach permitted before they resorted to flight. One was finally secured by taking advantage of a board fence that crossed the island and some intervening bushes; creeping forward as far as was safe without being seen, a 75-yard shot with No. 5 shot secured the long sought for bird.

Rock Wrens (*Salpinctes obsoletus*) were fairly numerous but differed in no way from the same species on the mainland. A pair of Large-billed Sparrows (*Passerculus rostratus*) were seen in a patch of salt grass and one of the two secured. Black Phœbes (*Sayornis nigricans*) Say's Phœbe (*Sayornis saya*) were both present, probably migrants from the mainland.

Mockingbirds (*Mimus polyglottos leucopterus*) breeds sparingly on the island, perhaps less than a half dozen pairs. Only one was seen and taken. One shrike (*Lanius*) was seen but not taken. A Great Blue Heron (*Ardea herodias*) was seen at different times, but always alone.

A LIST OF LAND BIRDS FROM CENTRAL AND SOUTHEASTERN WASHINGTON.

BY ROBERT E. SNODGRASS.

THE list of birds here given is the ornithological result of a collecting expedition sent into the field during the summer of 1903 by the Washington Agricultural College. The expedition started from Pullman and, going westward through Connell and across the White Bluffs Ferry on the Columbia River as far as the town of North Yakima, traversed the southern part of Whitman County, the southeastern corner of Adams County, Franklin County, the extreme south end of Douglas County, and the north-